

REMARKS/ARGUMENTS

This Supplemental Response is filed in response to the Notice of Non-Compliant Amendment (37 CFR 1.121) mailed April 11, 2005, a copy of which is attached hereto. In the Final Office Action mailed January 25, 2005 ("*Final Office Action*"), claims 1-6, 9, 12-16 and 18 stand rejected. In the Response to the Office Action ("*Response*") filed contemporaneously with the RCE on March 30, 2005, Applicants mistakenly cancelled claims 10-11 twice. In this Supplemental Response to the Office Action, one of those instructions has been deleted, enabling claims 10-11 to be cancelled, claims 1, 3-4, 6, 9 and 13-16 be amended and claims 22-29 added. It is respectfully submitted that the pending claims define allowable subject matter.

Claims 1-6, 9, 12-16 and 18 stand rejected under 35 U.S.C. §102(a) as being anticipated by Wong, U.S. Patent No. 6,377,075 ("*Wong*"). Claims 1, 3-4, 6, 9 and 13-16 are amended. Applicants submit that the §102(a) rejection of claims 1-6, 9, 12-16 and 18 has been overcome.

It is well established that anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. As such, for an anticipation rejection, all of the elements and limitations of the claim must be found within a single prior art reference. Moreover, the Examiner bears the initial burden of establishing a *prima facie* case of anticipation.

The *Final Office Action* provides that *Wong* discloses:

a circuit coupled to an output device (circuit of Figure 2), the circuit comprising at least one transistor device comprising at least one p-channel transistor device (M4), said at least one transistor device adapted to limit a duration of a high voltage across the output device thereby reducing hot carrier injection stress (see abstract).¹

Applicants respectfully disagree.

Wong specifically discloses

"a circuit topology for avoiding gate oxide-dielectric breakdown and hot carrier-degradation in circuits, such as CMOS inverters ... An inverter circuit according to the invention incorporates transistors M6, M2, M3, M5 appropriately biased, additional to those of a standard inverter circuit

¹ *Final Office Action*, page 2, lines 12-16.

(comprising M1 and M4) in order to avoid hot-carrier degradation and gate-oxide breakdown of M4 and M1.²

In other words, *Wong* discloses an inverter circuit comprising six transistors M1, M2, M3, M4, M5 and M6 that avoids hot-carrier degradation and gate-oxide breakdown of a portion of the inverter circuit (i.e., a standard inverter circuit). *Wong* does not disclose a circuit coupled to an output device or circuit, where the circuit reduces stress on the output device or circuit.

Specifically, *Wong* does not disclose "[a] circuit coupled to an output device... adapted to limit a duration of a high voltage across the output device thereby reducing hot carrier injection stress across the output device" as recited by amended claim 1, among other features; "[a]n integrated circuit...coupled to at least said output circuit and said IO PAD and adapted to limit a duration of a high voltage across said output circuit when said output circuit is enabled, thereby reducing stress on said output circuit" as recited by amended claim 9, among other features; "[a] method of controlling hot carrier injection stress comprising limiting a duration of a high voltage across an output device using a stress circuit...to limit said duration of said high voltage across said output device when said output device is enabled" as recited by amended claim 16, among other features; nor "[a] method of reducing stress across an output circuit...enabling the output circuit...dissipating a voltage across the output circuit; and preventing the output circuit from experiencing HCI stress" as recited by claim 18, among other features.

Additionally, the *Final Office Action* provides that with respect to claim 9, *Wong* discloses "an integrated circuit comprising: an I/O PAD (pad coupled to 15)..."³ Applicants respectfully disagree. *Wong* does not disclose an "I/O PAD" as provided in the *Final Office Action*. Rather, *Wong* specifically discloses "input and output nodes 13,15"⁴ In other words, *Wong* discloses separate input and outputs, and not the "I/O Pad" as recited by amended claim 9, among other features.

The *Final Office Action* further provides that with respect to claim 18, "the methods therein are inherent given the apparatus of *Wong* as shown in the above

² *Wong*, Abstract, lines 1-10.

³ *Final Office Action*, page 2, lines 23-24 and page 3, line 1.

⁴ *Wong*, col. 3, lines 33-34.

rejections.”⁵ Applicants disagree. Applicants note that *Wong* does not disclose tri-stating or a tri-stating circuit. Applicants respectfully submit that if *Wong* does not disclose tri-stating or a tri-stating circuit, it does not disclose “determining if the output circuit is tri-stated” as recited by claim 18, among other features.

As all the elements of independent claims 1, 9, 16 and 18 are not disclosed in a single reference, Applicants respectfully submit that such claims are allowable. Claims 2-6 and 12-15 depend, directly or indirectly, from claims 1 and 9 respectively. Dependent claims 2-6 and 12-15 recite additional features and are believed allowable for all the reasons provided above with respect to claims 1 and 9.

New claims 22-25 depend from independent claim 18, recite additional features thereto and are believed allowable for all the reasons provided above with respect to claim 18. New claims 26-29 are similar in many respects to claims 1-6. Applicants submit that new claims 26-29 are allowable for the reasons provided above for claims 1-6.

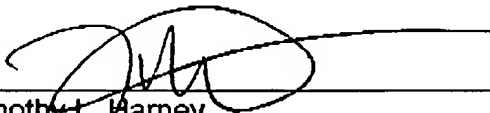
No fee is believed due, as the fee was previously provided with the *Response* and RCE filed March 30, 2005. In the event any additional fees are required, please charge the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

⁵ *Final Office Action*, page 3, lines 11-12.

In view of the foregoing, it is respectfully submitted that the pending claims define allowable subject matter, and Applicants respectfully request that the application be passed to issuance. Should the Examiner have any questions, he is invited to contact the undersigned at the telephone number listed below.

Dated: April 22, 2005

Respectfully submitted,



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Attachment: copy of Notice of Non-Compliant Amendment (37 CFR 1.121)

FROM MCANDREWS, HELD, & MALLOY

(FRI) 4. 22' 05 11:53/ST. 11:32/NO. 4861050104 P. 13



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,585	07/01/2003	Kent Oertle	13693LS02	6233
23446 7590 04/11/2005				
MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661				
EXAMINER				
ART UNIT		PAPER NUMBER		

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

RESPONSE DUE:



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
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P.O. BOX 1450
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Notice of Non-Compliant Amendment (37 CFR 1.121)

The amendment document filed on 3-30-05 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121. In order for the amendment document to be compliant, correction of the following item(s) is required. Only the corrected section of the non-compliant amendment document must be resubmitted (in its entirety), e.g., the entire "Amendments to the claims" section of applicant's amendment document must be re-submitted. 37 CFR 1.121(h).

THE FOLLOWING CHECKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
- ☐ A. Amended paragraph(s) do not include markings.
 - ☐ B. New paragraph(s) should not be underlined.
 - ☐ C. Other _____
- ☐ 2. Abstract:
- ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
 - ☐ B. Other _____
- ☐ 3. Amendments to the drawings: _____
- ☒ 4. Amendments to the claims:
- ☐ A. A complete listing of all of the claims is not present.
 - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
 - ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following 7 status identifiers: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New) and (Not entered).
 - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
 - ☒ E. Other: Please delete one of the claims to cancel claims 10-11

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP Sec. 714 and the USPTO website at <http://www.uspto.gov/web/offices/pac/dapp/opla/prognotice/officeflyer.pdf>.

If the non-compliant amendment is a **PRELIMINARY AMENDMENT**, applicant is given **ONE MONTH** from the mail date of this letter to supply the corrected section which complies with 37 CFR 1.121. Failure to comply with 37 CFR 1.121 will result in non-entry of the preliminary amendment and examination on the merits will commence without consideration of the proposed changes in the preliminary amendment(s). This notice is not an action under 35 U.S.C. 132, and this **ONE MONTH** time limit is not extendable.

If the non-compliant amendment is a reply to a **NON-FINAL OFFICE ACTION** (including a submission for an RCE), and since the amendment appears to be a *bona fide* attempt to be a reply (37 CFR 1.135(c)), applicant is given a **TIME PERIOD** of **ONE MONTH** from the mailing of this notice within which to re-submit the corrected section which complies with 37 CFR 1.121 in order to avoid abandonment. **EXTENSIONS OF THIS TIME PERIOD ARE AVAILABLE UNDER 37 CFR 1.136(a).**

If the amendment is a reply to a **FINAL REJECTION**, this form may be an attachment to an Advisory Action. The period for response to a final rejection continues to run from the date set in the final rejection, and is not affected by the non-compliant status of the amendment.

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Rcv. 6/04